

RCA VICTOR MODEL 56X

TRADE NAME		RCA Victor, Models 56X, 56X2, 56X3 (Chassis RC-1011)				
MANUFACTURER		Radio Corp. of America, RCA Victor Division - Camden, New Jersey				
TYPE SET		AC - DC Superheterodyne - Self Contained Loop Antenna				
TUBES (SIX)		Types 12SG7 Converter, 12J5GT Osc., 12SK7 IF Amp., 12SQ7 2nd Det.-AVC-AF, 35L6GT Power Output, 35Z5GT Rectifier				
POWER SUPPLY		117 Volts AC-DC Rating .240 Amp. @ 117 Volts AC				
TUNING RANGE—BROADCAST		540-1600KC		SHORT WAVE		
ALIGNMENT INSTRUCTIONS						
DUMMY ANTENNA *	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.01MFD	High side to stator of rear section of gang. Low side to B-.	455KC	Quiet point at 1600KC end of dial.	Across voice coil.	A1,A2, A3,A4	Adjust for maximum output. Use isolation transformer if available. If not, isolating capacitor must be connected between signal generator ground lead and B-. Also decrease dummy ant. to .001MFD to prevent excessive hum modulation.
200MMFD	High side to ant. lead. Low to B-.	1300KC	1300KC	"	A5	Adjust for maximum output.
"	" "	"	"	"	A6	" " " "

Volume control at maximum and output from signal generator as low as possible for all adjustments. Adjust dial pointer by rotating tuning condenser fully counter-clockwise (plates in full mesh). Dial pointer should be over max. cap. mark (Left) on dialback plate. Use insulated alignment screwdriver for adjusting trimmers.

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		RCA PART No.	STANDARD REPLACEMENT		
1	Converter	12SG7	12SG7	8BK	
2	Osc.	12J5GT	12J5GT	6Q	
3	IF Amp.	12SK7	12SK7	8N	
4	2ndDet.-AVC-AF	12SQ7	12SQ7	8Q	
5	Power Output	35L6GT	35L6GT	7AC	
6	Rectifier	35Z5GT	35Z5GT	6AD	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
		RCA PART No.	MALLORY PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.	
7(A)	50	39152	2N520	DHN-2X50-150	TA-530	PRS150-40-40	Filter - Red
(B)	30						Filter - Green
8	.05	70615	TP426	S-4-05	TC-15	484-.05	Line Filter
9	.1	70617	TP428	S-4-1	TC-1	484-.1	Line Isolating
10	.02	70711	TP412	S-6-02	TC-12	684-.02	35L6 Plate
11	.0018	70712	TP405	S-6-002	TC-22	684-.002	Tone Control
12	.005	70627	TP408	S-6-005	TC-25	684-.005	Audio Coupling
13	.02	70711	TP412	S-6-02	TC-12	684-.02	"
14	.01	70652	TP410	S-6-01	TC-11	684-.01	Osc. Coupling
15	.01	70652	TP410	S-6-01	TC-11	684-.01	12SG7 Screen Bypass
16	.035	70635	TP414	S-6-04	TC-14	684-.03	AVC Filter
17	.01	70652	TP410	S-6-01	TC-11	684-.01	Ant. Coupling
18	330	39640	MC243	MO. 5-34	1FM-34	1468-.0004	12SQ7 Plate Bypass

CONTROLS

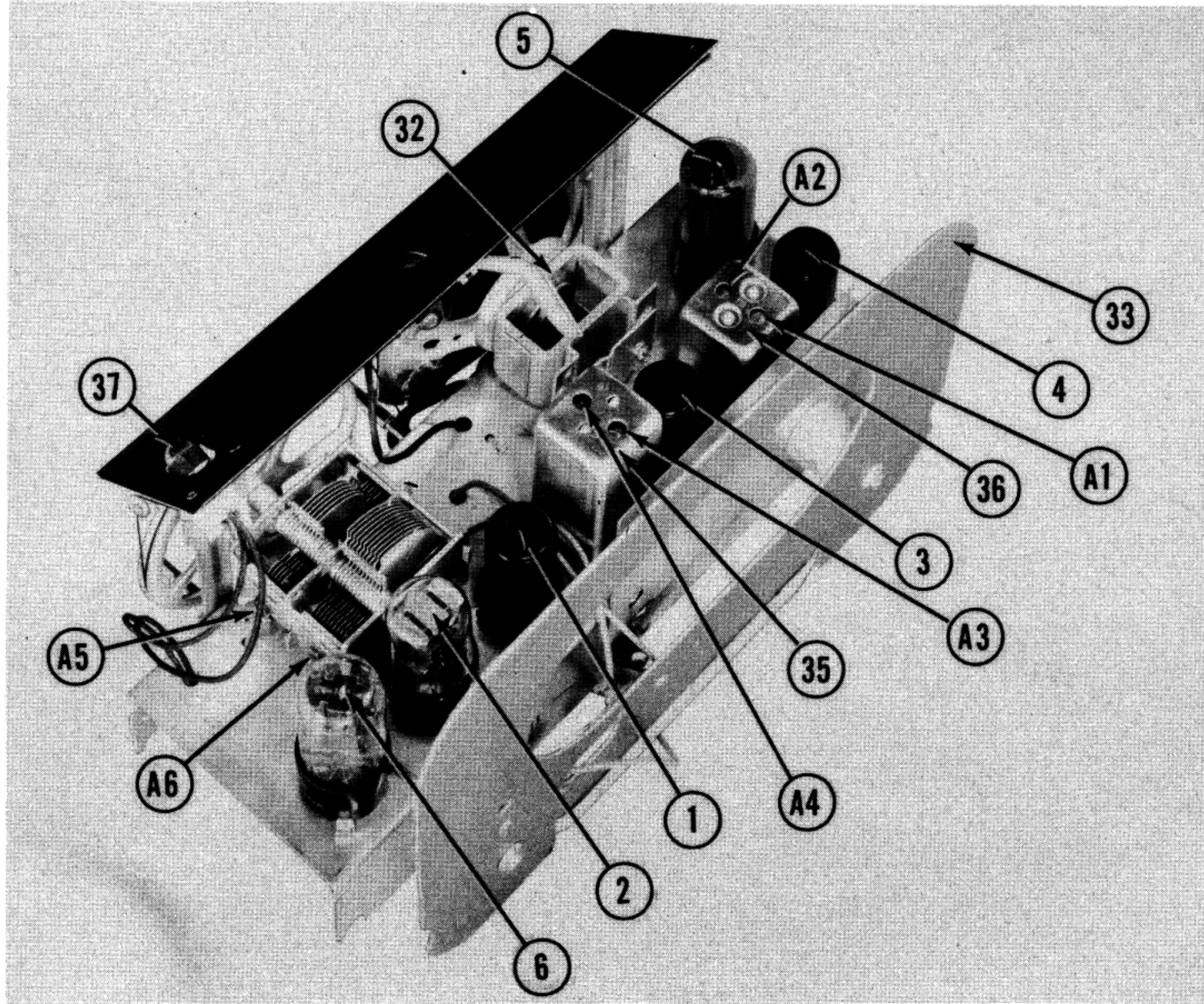
ITEM No.	RATING	REPLACEMENT DATA				INSTALLATION NOTES
		RESISTANCE	WATTS	MALLORY PART No.	CLAROSTAT PART No.	
19(A)	500K Ω	1		MR48*	DS13-133*	M-60-Z*
(B)	Switch			Not Req.	M26T	SW-A6

*Install a 50K Ω resistor in series with the right hand terminal of the control and the lead connecting to the same terminal of the original control. (Control viewed from the shaft side, terminals down.) Attach to 19A per instructions.

RESISTORS

ITEM No.	RATING	REPLACEMENT DATA			IDENTIFICATION CODES
		RESISTANCE	WATTS	RCA PART No.	
20	3300 Ω			30733	Or.-Or.-Red Mixer Cathode
21	15 Meg.			38785	Br.-Grn.-Blue AVC Network
22	22K Ω			30492	Red-Red-Or. Osc. Grid
23	1500 Ω			30654	Br.-Grn.-Red Screen Dropping
24	3.3 Meg.			12928	Or.-Or.-Grn. AVC Network
25	4.7 Meg.			30931	Yl.-Yl.-Vl.-Grn. 1st Af Grid
26	220K Ω			14583	Red-Red-Yl. Plate Load
27	120 Ω			30189	Br.-Red-Br. Output Cathode
28	470K Ω			30648	Yl.-Yl.-Vl. Output Grid
29	1200 Ω			6134	Br.-Red-Red Filter
30	220K Ω			14583	Red-Red-Yl. Line Isolating

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS

TRANSFORMER (OUTPUT)

ITEM No.	RATING			REPLACEMENT DATA			INSTALLATION NOTES
	IMPEDANCE	DC RES.		RCA PART No.	THORNDYKE PART No.	UTAH PART No.	
31	2220Ω	3.4Ω	235Ω	36800 (352605)	A3676†	T13S42†	8775†
							†When using listed replacements disregard tapped primary which is used in conjunction with 1200Ω resistor for filtering purposes. Drill new mounting holes.

SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			INSTALLATION NOTES
	FIELD	VC IMP.		RCA PART No.	JENSEN PART No.	UTAH PART No.	
32	PM	3.4		70413	ST-443†	5PY†	Original Part No. 92510-1 †When using these units a suitable mounting bracket must be improvised to duplicate speaker position.
	CONC DIA:	VC DIA:					NOT REPLACEABLE - USE COMPLETE SPEAKER UNIT

R F COILS

ITEM No.	USE	DC RES.			REPLACEMENT DATA			INSTALLATION NOTES
		PRI.	SEC.		RCA PART No.	MEISSNER PART No.		
33	Loop Ant.	0	1Ω		39821			
34	Osc.	2.5Ω	7Ω		39824			
35	Input IF	8Ω	8Ω		70411			Original Part No. M922226-3
36	Output IF	15Ω	15Ω		70412	16-5740		Original Part No. 922226-4

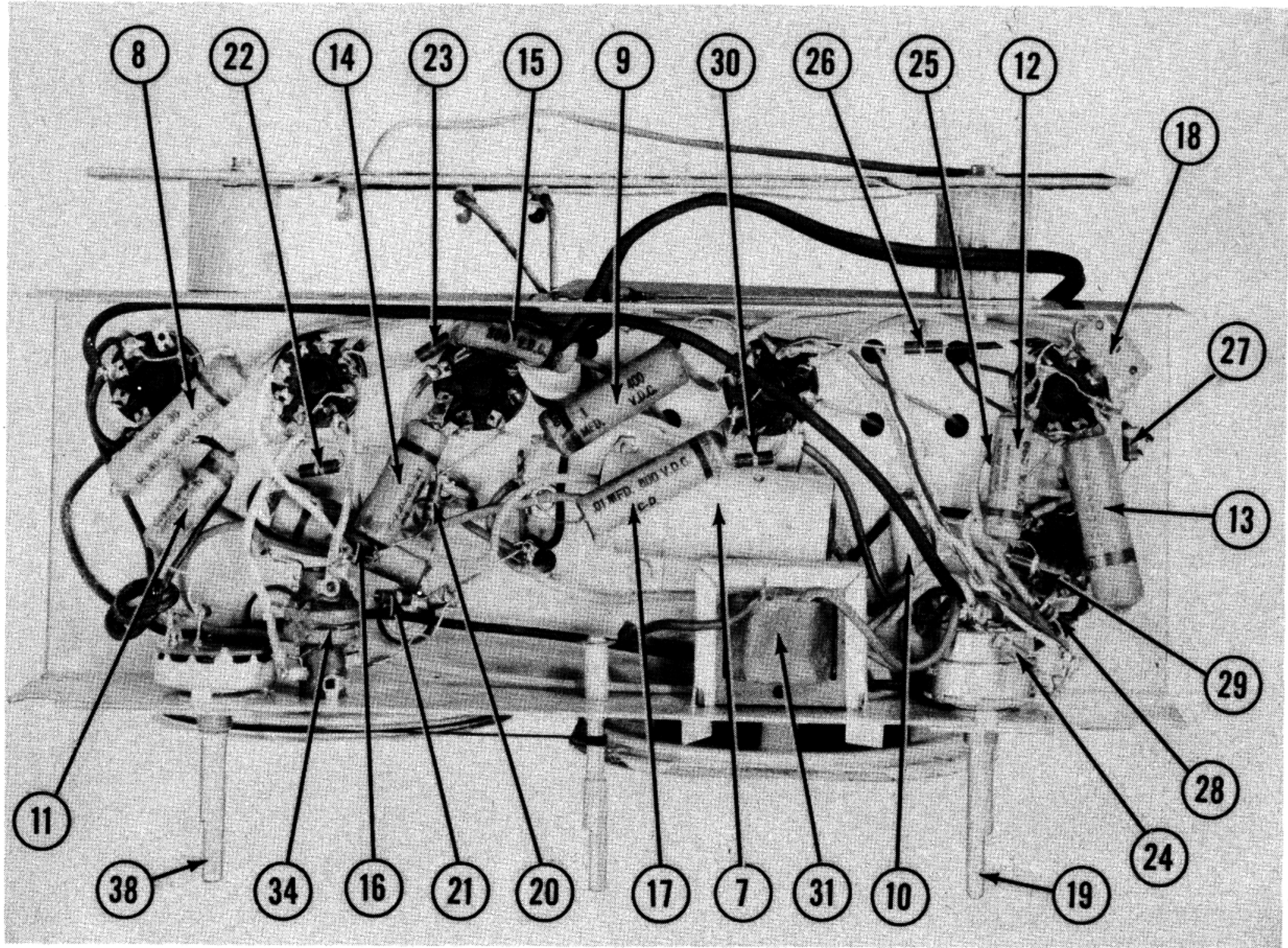
DIAL LIGHT

ITEM No.	BASE TYPE	VOLTS	AMPS.	REPLACEMENT DATA		INSTALLATION NOTES
				BEAD COLOR	RCA PART No.	
37	Min. Bayonet	6-8	0.2	White	11765	Type 51

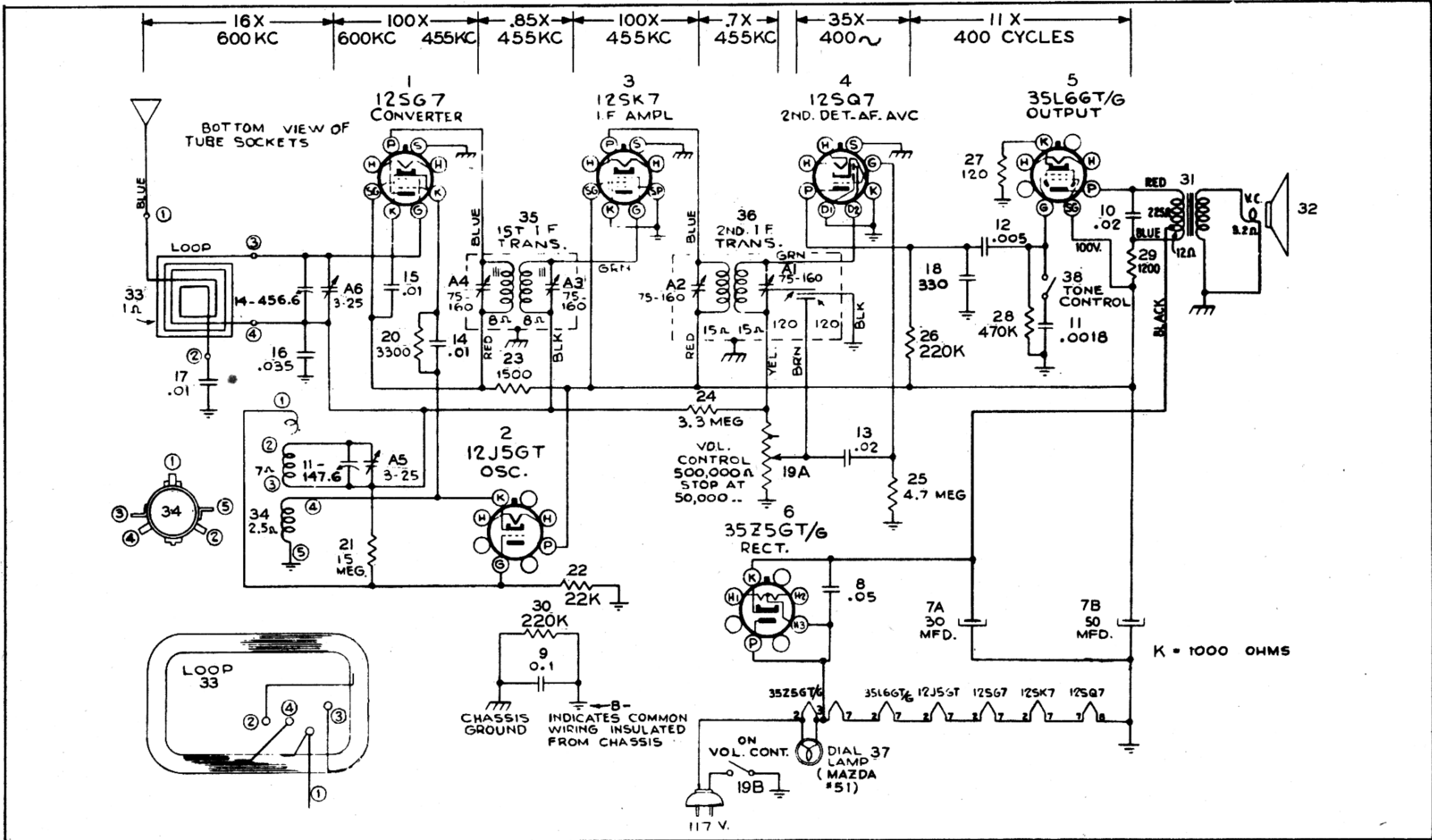
MISCELLANEOUS

ITEM No.	PART NAME	RCA PART No.	NOTES
A5	Trimmer		3-25MMF Part of 36226
A6	Tun. Cap.	36226	2 Gang Main Tuning Cap (Ant. 14-456MMF)
38	Tone Switch Knob	36228 70414 36722	Ivory-for 56X2 Walnut-for 56X, 56X3

CHASSIS—BOTTOM VIEW

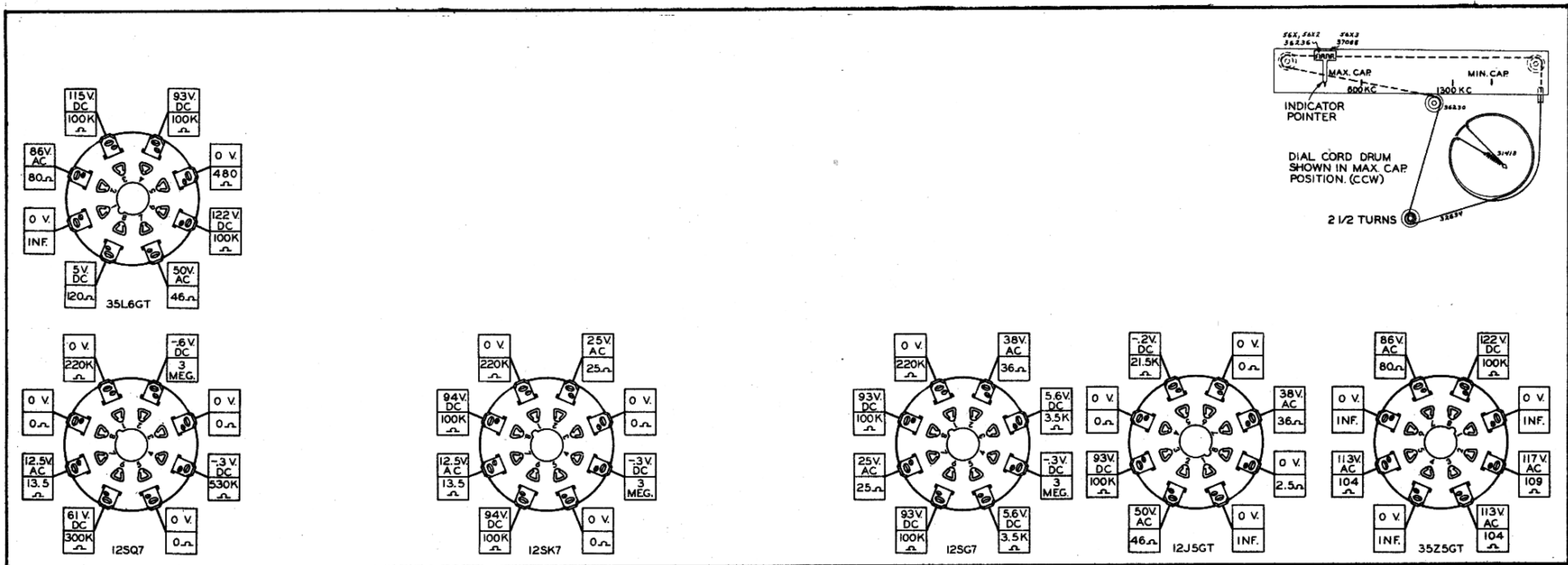


SCHEMATIC DIAGRAM



The stage gain measured values listed above are approximate values for an average operative stage, rather than an absolute value. It should be borne in mind that it is possible to introduce so many variables into the measurement operation, such as, type of equipment used for measuring, handling and placement of probes, the accuracy of alignment, etc., that an absolute reading is impractical. AVC is made inoperative and 3-volt battery bias substituted for measurement.

VOLTAGE AND RESISTANCE ANALYSIS CHART



- 1 - DC Voltage measurements are at 20,000 ohms per volt: AC Voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Line voltage maintained at 117 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

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